

PROPOSED STATEWIDE RELATIVE PRICE (S-RP) METHODOLOGY

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center
for health
information
and analysis

Statewide Relative Price (S-RP) Background



Chapter 115 of the Acts of 2016 created the Community Hospital Reinvestment Trust Fund (CHRTF).

The CHRTF is managed by the Secretary of EOHHS and is intended to be used to provide financial support to “eligible acute care hospitals.”

To be eligible to receive payment from the fund, an acute care hospital...shall not be a hospital with relative prices that are at or above 120 per cent of the statewide median relative price, as determined by the center for health information analysis.¹

CHIA must develop a S-RP methodology to determine which acute care hospitals are eligible to receive payments from the CHRTF.

Guiding Principles for S-RP Measure Development



CHIA currently collects and reports on relative price (RP) data for acute care hospitals on an annual basis.

However, the conventional RP measure does not readily lend itself to calculating a statewide metric due to its payer-specific construction and lack of standardized outpatient payment data components across payers.

Given this context, CHIA maintained two guiding principles for the development of a S-RP measure:

- 1) the method must be methodologically sound and leverage the existing framework and core data of the conventional RP method; and
- 2) the method should be calibrated to reflect each provider's individual experience to the extent practical.

RP Background



RP is an aggregate measure used to evaluate variation in prices for similar providers within individual payer networks.

- By construction, the network average RP equals 1.0 for each payer network.
- This measure allows for a relative comparison of each provider's price level within a given payer network in a given year.

However, because RP is specific to each payer's network, RP values are not directly comparable across payers.

- A provider with a higher RP for a given payer may not have higher prices than it has with other payers where its RP is lower.
- As a result, RP cannot be used to draw conclusions about absolute price levels across payers.

Proposed S-RP Methodology: Provider-Weighted Blending



After reviewing 2014 and 2015 RP data and considering input from actuarial consultants and other stakeholders, CHIA proposes the following S-RP methodology:

1. Blend each provider's **inpatient adjusted base rate (ABR)** across payers based on the payer share of inpatient payments for each provider and convert the cross-payer ABRs to relativities;
2. Blend each provider's **outpatient RP** across payers based on the payer share of outpatient payments for each provider;
3. Blend each provider's cross-payer inpatient and outpatient S-RPs into a **single blended cross-payer S-RP** based on the inpatient/outpatient share of payments for each provider.

We believe this approach achieves the most accurate measure of S-RP and is as reflective of each provider's experience as practical.

Example Calculation: Inpatient S-RP



Step 1a: Calculate product-adjusted, payer-specific payments per case-mix adjusted discharge (i.e., product-adjusted ABR)

Hospital	Payer	Insurance Category	Product Type	Product-Adjusted ABR	Payer Share of Total Hospital-Specific Inpatient Payments (claims + non-claims)
Hospital 1	Payer A	Commercial	All Types Combined	\$10,000	30%
Hospital 1	Payer B	Commercial	All Types Combined	\$12,000	12%
Hospital 1	Payer C	Commercial	All Types Combined	\$8,000	58%
Hospital 2	Payer A	Commercial	All Types Combined	\$9,500	33%
Hospital 2	Payer B	Commercial	All Types Combined	\$10,000	37.5%
Hospital 2	Payer C	Commercial	All Types Combined	\$12,000	30%
Hospital 3	Payer A	Commercial	All Types Combined	\$15,000	40%
Hospital 3	Payer C	Commercial	All Types Combined	\$13,500	60%

Step 1b: Combine payer-specific ABRs into a single, cross-payer ABR for each hospital using the share of total inpatient payments made by each payer to a given hospital to weight each payer-specific ABR

Hospital	Payer	Insurance Category	Product Type	Cross-Payer ABR
				= Sum of ("Product-Adjusted ABR" series * "Share of Total Hospital-Specific Inpatient Payments" series)
Hospital 1	N/A	Commercial	All Types Combined	\$9,080
Hospital 2	N/A	Commercial	All Types Combined	\$10,425
Hospital 3	N/A	Commercial	All Types Combined	\$14,100

Step 1c: Compute statewide average ABR as the mean across all hospitals of the cross-payer ABRs calculated in step 1b

Statewide Average Inpatient ABR
= Average of "Cross-Payer ABR" series
\$11,202

Step 1d: Calculate the cross-payer inpatient S-RP values for each hospital by dividing the hospital-specific all-payer ABRs (1b) by the statewide average cross-payer ABR (1c)

Hospital	Payer	Insurance Category	Product Type	Cross-Payer Inpatient S-RP
				= Hospital X "Cross-Payer ABR" / "Statewide Average Inpatient ABR"
Hospital 1	N/A	Commercial	All Types Combined	0.81
Hospital 2	N/A	Commercial	All Types Combined	0.93
Hospital 3	N/A	Commercial	All Types Combined	1.26

Example Calculation: Outpatient S-RP



Step 1f: Calculate payer-specific outpatient RPs by dividing the payer-specific adjusted rates by the payer-specific network average adjusted rate

Hospital	Payer	Ins. Cat.	Product Type	Payer-Specific Outpatient RP	Payer Share of Total Hospital-Specific Outpatient Payments (claims + non-claims)
Hospital 1	Payer A	Commercial	All Types Combined	0.98	25.0%
Hospital 1	Payer B	Commercial	All Types Combined	0.69	18.0%
Hospital 1	Payer C	Commercial	All Types Combined	1.01	57.0%
Hospital 2	Payer A	Commercial	All Types Combined	0.79	25.0%
Hospital 2	Payer B	Commercial	All Types Combined	1.31	35.0%
Hospital 2	Payer C	Commercial	All Types Combined	0.95	40.0%
Hospital 3	Payer A	Commercial	All Types Combined	1.23	45.0%
Hospital 3	Payer C	Commercial	All Types Combined	1.05	55.0%

Step 1g: Combine the payer-specific RPs into a single, cross-payer RP for each hospital using the share of total outpatient payments made by each payer to a given hospital to weight each RP

Hospital	Payer	Ins. Cat.	Product Type	Cross-Payer Outpatient RP
				= Sum of Hospital X ("Payer-Specific Outpatient RP" * "Share of Total Hospital-Specific Outpatient Payments")
Hospital 1	N/A	Commercial	All Types Combined	0.94
Hospital 2	N/A	Commercial	All Types Combined	1.03
Hospital 3	N/A	Commercial	All Types Combined	1.13

Step 1h: Compute the statewide average outpatient cross-payer RP as the mean of the hospital-specific cross-payer RP calculated in step 1g

Statewide Average Cross-Payer Outpatient RP
= Average "Cross-Payer Outpatient RP" series
1.04

Step 1i: Calculate the cross-payer outpatient S-RP for each hospital by dividing the hospital-specific all-payer adjusted rates (1g) by the statewide average (1h)

Hospital	Payer	Ins. Cat.	Product Type	Cross-Payer Outpatient S-RP
				= Hospital X "Cross-Payer Outpatient RP" / "Statewide Average Cross-Payer Outpatient RP"
Hospital 1	N/A	Commercial	All Types Combined	0.91
Hospital 2	N/A	Commercial	All Types Combined	1.00
Hospital 3	N/A	Commercial	All Types Combined	1.09

Example Calculation: Blended S-RP



Step 2a: Calculate the share of cross-payer total payments accounting for inpatient and outpatient services for each hospital

Hospital	Ins. Cat.	Product Type	Cross-Payer Inpatient S-RP	Cross-Payer Outpatient S-RP	Hospital Specific Inpatient Share of Total Spending	Hospital Specific Outpatient Share of Total Spending
Hospital 1	Commercial	All Types Combined	0.81	0.91	40%	60%
Hospital 2	Commercial	All Types Combined	0.93	1.00	50%	50%
Hospital 3	Commercial	All Types Combined	1.26	1.09	60%	40%

Step 2b: Using the hospital-specific inpatient and outpatient payment shares calculated in step 2a as weights, combine each hospital's all-payer inpatient and outpatient S-RP values (1d and 1i)

Hospital	Ins. Cat.	Product Type	Interim Blended Cross-Payer S-RP
			= Hospital X ("Cross-Payer Inpatient S-RP" * "Hospital Specific Inpatient Share of Total Spending" + "Cross-Payer Outpatient S-RP" * "Hospital Specific Outpatient Share of Total Spending")
Hospital 1	Commercial	All Types Combined	0.87
Hospital 2	Commercial	All Types Combined	0.96
Hospital 3	Commercial	All Types Combined	1.19

Step 2c: Compute the statewide average of the interim blended cross-payer S-RP as the mean of the hospital-specific interim blended cross-payer S-RP calculated in step 2b

Statewide Average of Interim Blended Cross-Payer S-RP
= Average of "Interim Blended Cross-Payer S-RP" series
1.01

Step 2d: Calculate the final blended cross-payer S-RP for each hospital by dividing the hospital-specific interim blended cross-payer S-RP (2b) by the statewide average (2c)

Hospital	Ins. Cat.	Product Type	Final Blended Cross-Payer S-RP
			= Hospital X "Interim Blended Cross-Payer S-RP"/"Statewide Average of Interim Blended Cross-Payer S-RP"
Hospital 1	Commercial	All Types Combined	0.86
Hospital 2	Commercial	All Types Combined	0.96
Hospital 3	Commercial	All Types Combined	1.18

Step 3: Calculate Median Statewide RP

Median S-RP	120% of Median S-RP
= Median "Blended Cross-Payer S-RP" Series	= 1.2 * "Median S-RP"
0.96	1.15

Acute Care Hospitals



Anna Jaques Hospital
Athol Memorial Hospital
Baystate Franklin Medical Center
Baystate Mary Lane Hospital
Baystate Medical Center
Baystate Noble Hospital
Baystate Wing Hospital
Berkshire Medical Center
Beth Israel Deaconess Hospital - Milton
Beth Israel Deaconess Hospital - Needham
Beth Israel Deaconess Hospital - Plymouth
Beth Israel Deaconess Medical Center
Boston Children's Hospital
Boston Medical Center
Brigham and Women's Faulkner Hospital
Brigham and Women's Hospital
Cambridge Health Alliance
Cape Cod Hospital
Clinton Hospital - A member of the UMASS Memorial Health Center
Cooley Dickinson Hospital
Dana-Farber Cancer Institute

Emerson Hospital
Fairview Hospital
Falmouth Hospital
Hallmark Health
Harrington Memorial Hospital
HealthAlliance Hospital
Heywood Hospital
Holy Family Hospital
Holyoke Medical Center
Lahey Health - Winchester Hospital
Lahey Hospital & Medical Center
Lawrence General Hospital
Lowell General Hospital
Marlborough Hospital - A member of the UMASS Memorial Health Center
Martha's Vineyard Hospital
Massachusetts Eye and Ear Infirmary
Massachusetts General Hospital
Mercy Medical Center
MetroWest Medical Center
Milford Regional Medical Center
Morton Hospital, A Steward Family Hospital, Inc.

Mount Auburn Hospital
Nantucket Cottage Hospital
Nashoba Valley Medical Center
New England Baptist Hospital
Newton-Wellesley Hospital
North Shore Medical Center
Northeast Hospital
Saint Vincent Hospital
Shriners Hospitals for Children Boston
Shriners Hospitals for Children Springfield
Signature Healthcare Brockton Hospital
South Shore Hospital
Southcoast Hospitals Group
Steward Carney Hospital, Inc.
Steward Good Samaritan Medical Center
Steward Norwood Hospital, Inc.
Steward Saint Anne's Hospital, Inc.
Steward St. Elizabeth's Medical Center
Sturdy Memorial Hospital
Tufts Medical Center
UMass Memorial Medical Center

Next Steps



CHIA is currently finalizing our calendar year 2015 S-RP analysis using the proposed methodology. Based on our preliminary review of the data, CHIA expects approximately 50-55 acute care hospitals to be meet this eligibility criterion.

CHIA will publish the contents of this webinar on our website today and will add aggregate results from our preliminary analysis when complete. We intend to publish the aggregate results by early next week.

CHIA will transmit individual hospital results using the proposed methodology to the Chief Financial Officer or equivalent of each acute care hospital upon completion of our preliminary analysis. Hospitals will only receive their own results.

Public Comment



CHIA requests public comment on the proposed methodology for calculating S-RP.

To be assured consideration, comments must be received no later than **5 p.m. ET on Friday, December 9th.**

Comments may only be submitted electronically via email. All comments should be emailed to tmerp@state.ma.us and should include the following subject line: "Statewide RP Methods".

Following a review of the submitted comments, CHIA will issue a final methodology for calculating S-RP and will release results based on existing calendar year CY 2015 relative price data.

Questions?